



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

OCT 01 2008

REPLY TO THE ATTENTION OF:

(AE-17J)

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Daniel Sajkowski, Business Unit Leader
BP Products North America, Inc.
2815 Indianapolis Boulevard
Whiting, Indiana 46394

Re: Amendment to Notice of Violation
and Finding of Violation
EPA-5-08-IN-01
Whiting, Indiana Refinery

Dear Mr. Sajkowski:

As you are aware, on November 29, 2007, the U.S. Environmental Protection Agency issued a Notice of Violation and Finding of Violation (NOV/FOV) to BP Products North America, Inc. for its facility at 2815 Indianapolis Boulevard, Whiting, Indiana (BP Whiting). The Clean Air Act (CAA) requires the development of Primary and Secondary National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. To attain and maintain these standards, each state is required to develop an implementation plan. Indiana's State Implementation Plan (Indiana SIP) includes the following requirements as set forth in EPA's November 29, 2007 NOV/FOV:

- 1) No person shall commence construction or modification of any air pollution source without first applying for and obtaining a construction permit from the commissioner of the Indiana Department of Environmental Management.
- 2) An owner or operator may not begin construction of a major modification at a major stationary source in an area that does not meet the NAAQS without first obtaining a permit to install (PTI) that contains an emission limit that represents the lowest achievable emission rate.
- 3) An owner or operator may not begin operation of a major modification at a major stationary source in an area that does not meet the NAAQS without first applying controls to achieve the lowest achievable emission rate for the pollutant for which the modification is major.

- 4) An owner or operator may not begin construction of a major modification at a major stationary source in an area that does not meet the NAAQS without first certifying that all major stationary sources owned or operated by the same entity in the State of Indiana are in compliance with the CAA.
- 5) An owner or operator may not begin construction of a major modification at a major stationary source in an area that does not meet the NAAQS without first obtaining offsetting emission reductions from other stationary sources in the same area.
- 6) An owner or operator may not begin construction of a major modification at a major stationary source in an area that meets the NAAQS without first obtaining a PTI that contains an emission limit that represents the best available control technology.
- 7) An owner or operator may not begin operation of a major modification at a major stationary source in an area that meets the NAAQS without installing the best available control technology for reducing the emissions of the pollutant for which the modification is major.

The enclosed Amendment to the NOV/FOV states that the activities BP conducted at its Whiting refinery beginning in 2005 violated the Indiana SIP requirements as these activities allowed BP to commence construction of its Canadian crude expansion project prior to issuance of an appropriate permit, and resulted in a major construction and/or modification at the refinery that includes the new and modified units identified in Appendix A.

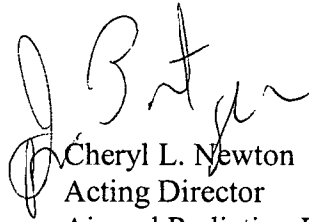
Since BP Whiting's facility is subject to these applicable requirements under the Indiana SIP that are not listed in its Title V permit, it has also violated Title V of the CAA and its associated regulations which require all CAA requirements applicable to a source to be incorporated into that source's Title V permit.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action. Section 113 of the CAA provides you with the opportunity to request a conference with us about the violations alleged in the Amendment to the NOV/FOV. A conference should be requested within 10 days following receipt of this notice. A conference should be held within 30 days following receipt of this notice. This conference will provide you with an opportunity to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA technical contacts in this matter are Kathryn Siegel and Erik Hardin. You may call them at (312) 353-1377 and (312) 886-2402, respectively, if you wish to request a conference. EPA hopes that this Amendment to the NOV/FOV will encourage BP Whiting's compliance with the requirements of the Clean Air Act.

Sincerely,

A handwritten signature in dark ink, appearing to read "Cheryl L. Newton", is written over the printed name.

Cheryl L. Newton
Acting Director
Air and Radiation Division

Enclosure

cc: Craig Henry, Chief
Office of Enforcement, Air Section
Indiana Department of Environmental Management

William L. Patberg
Shumaker, Loop & Kendrick, LLP

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:)	
)	AMENDMENT TO
BP Products North America)	NOTICE OF VIOLATION AND
Whiting, Indiana)	FINDING OF VIOLATION
)	EPA-5-08-IN-01
Proceedings Pursuant to the Clean Air Act,)	
42 U.S.C. § 7401 <i>et seq.</i>)	

AMENDMENT TO NOTICE OF VIOLATION AND FINDING OF VIOLATION

BP Products North America, Inc. (BP or you) owns and operates a petroleum refinery at 2815 Indianapolis Boulevard, Whiting, Indiana (BP Whiting). The refinery consists of a number of pieces of equipment that generate air pollution and are subject to provisions of the Clean Air Act (the Act or CAA).

The U.S. Environmental Protection Agency is sending this Amendment to the Notice of Violation and Finding of Violation (Amendment to NOV/FOV or Notice) issued to you on November 29, 2007, to notify you that we allege that you constructed a major modification causing a significant increase in nitrogen oxides (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO), particulate matter (PM), particulate matter less than 10 microns (PM₁₀) emissions at a major stationary source in an area that was designated as nonattainment for ozone and SO₂¹ and attainment for CO, PM, PM₁₀, and nitrogen dioxide (NO₂) at the time of the modification, without first obtaining a construction permit meeting the New Source Review (NSR) and Prevention of Significant Deterioration (PSD) requirements in the Indiana State Implementation Plan (SIP). Further, we find that you have failed to comply with Title V requirements by not incorporating all applicable requirements into your Title V operating permit. All of these violations constitute violations of the Act.

Section 113 of the Act provides you with the opportunity to request a conference with us to discuss the violations alleged in the NOV/FOV. This conference will provide you with the opportunity to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for the facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

¹ Lake County was non-attainment for SO₂ until September 26, 2005. 70 Fed. Reg. 56129.

Regulatory Background

1. The following provisions of the Indiana SIP are relevant to this Amendment to the NOV/FOV:

Construction Permit

- a. Indiana SIP Rule 326 Indiana Administrative Code (IAC) 2-1-03(a) prohibits any person from commencing construction or modifying any air pollution source without first applying for and obtaining a construction permit from the commissioner of the Indiana Department of Environmental Management (IDEM).
- b. Indiana SIP Rule 326 IAC 2-1-03(c) requires any person proposing the construction or modification of a major stationary PSD source or major PSD modification, which is or which will be located in an attainment area or unclassified area, to comply with the requirements of Indiana SIP Rule 326 IAC 2-2.
- c. Indiana SIP Rule 326 IAC 2-1-03(d) requires any person proposing the construction or modification of a major source or facility, which will be located in a nonattainment area, to comply with the requirements of Indiana SIP Rule 326 IAC 2-3.

Attainment PSD

- d. Indiana SIP Rule 326 IAC 2-2-2 states that new or modified major stationary sources or major modifications, constructed in an area designated as in attainment for a pollutant for which the stationary source or modification is major, are subject to 326 IAC 2-2, which contains the PSD provisions of the Indiana SIP.
- e. Indiana SIP Rule 326 IAC 2-2-1(gg)(1)(K) defines "major stationary source" in an attainment area as a petroleum refinery that emits, or has the potential to emit 100 tons per year or more of any regulated NSR pollutant.
- f. Indiana SIP Rule 326 IAC 2-2-1(ee) defines "major modification" as any physical change or change in the method of operation of a major stationary source that would result in a significant emissions increase.
- g. Indiana SIP Rule 326 IAC 2-2-1(jj) defines "net emissions increase" as the amount by which the sum of the increase in emissions from a physical change or change in the method of operation and any other contemporaneous increases or decreases in emissions exceeds zero.
- h. In reference to CO, Indiana SIP Rule 326 IAC 2-2-1(xx) defines "significant" with regard to a net emissions increase as the rate of emissions that would equal or exceed 100 tons per year.

- i. In reference to PM, Indiana SIP Rule 326 IAC 2-2-1(xx) defines "significant" with regard to a net emissions increase as rate of emissions that would equal or exceed 25 tons per year.
- j. In reference to PM₁₀, Indiana SIP Rule 326 IAC 2-2-1(xx) defines "significant" with regard to a net emissions increase as the rate of emissions that would equal or exceed 15 tons per year.
- k. In reference to NO_x, Indiana SIP Rule 326 IAC 2-2-1(xx) defines "significant" with regard to a net emissions increase as the rate of emissions that would equal or exceed 40 tons per year.
- l. Indiana SIP Rule 326 IAC 2-2-3(2) requires that owners or operators making a major modification apply best available control technology (BACT) for each regulated pollutant for which the modification would result in a significant net emissions increase.
- m. Indiana SIP Rule 326 IAC 2-2-1(i) defines "BACT" as an emissions limitation based on the maximum degree of reduction for each regulated NSR pollutant that would be emitted from any proposed major modification.
- n. Indiana SIP Rule 326 IAC 2-2-5 requires that owners or operators of a proposed major modification demonstrate that allowable emission increases in conjunction with all other applicable emission increases or reductions will not cause or contribute to air pollution in violation of any ambient air quality standard or applicable maximum allowable increase over the baseline concentration in any area.

Non-attainment NSR

- o. Indiana SIP Rule 326 IAC 2-3-2(a) states that new or modified major stationary sources or major modifications, constructed in an area designated as in non-attainment for a pollutant for which the stationary source or modification is major, are subject to 326 IAC 2-3, which contains the nonattainment NSR provisions of the Indiana SIP.
- p. Indiana SIP Rule 326 IAC 2-3-1(aa) (1) defines a "major stationary source" as any stationary source of air pollutants which emits, or has the potential to emit, one hundred (100) tons per year or more of any air pollutant subject to regulation under the Clean Air Act.
- q. Indiana SIP Rule 326 IAC 2-3-1(z) defines "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in a significant emissions increase.

- r. Indiana SIP Rule 326 IAC 2-3-1(dd) defines "net emissions increase" as the amount by which the sum of the increase in emissions from a physical change or change in the method of operation and any other contemporaneous increases or decreases in emissions exceeds zero.
- s. In reference to NO_x, Indiana SIP Rule 326 IAC 2-3-1(qq) defines "significant" with regard to a net emissions increase as the rate of emissions that would equal or exceed 40 tons per year.
- t. In reference to SO₂, Indiana SIP Rule 326 IAC 2-3-1(qq) defines "significant" with regard to a net emissions increase as the rate of emissions that would equal or exceed 40 tons per year.
- u. Indiana SIP Rule 326 IAC 2-3-3(a) (2) requires that, prior to the issuance of a construction permit, the applicant must apply emission limitation devices or techniques to the proposed construction or modification such that it achieves the Lowest Achievable Emission Rate (LAER) for the applicable pollutant.
- v. Indiana SIP Rule 326 IAC 2-3-1(y) defines "LAER" as the more stringent rate of emissions based on the most stringent emissions limitation for that particular source contained in the implementation plan of any state or achieved in practice.
- w. Indiana SIP Rule 326 IAC 2-3-3(a) (5) requires that emissions resulting from the proposed construction or modification be offset by a reduction in actual emissions of the same pollutant from an existing source or combination of existing sources.
- x. Indiana SIP Rule 326 IAC 2-3-3(a) (7) states that the applicant must obtain the necessary preconstruction approvals and must meet all the permit requirements specified in Indiana SIP rule 326 IAC 2-1.
- 2. The following Title V provisions and underlying requirements located at 40 C.F.R. Part 70 are relevant to this Amendment to the NOV/FOV:
 - a. Title V of the CAA establishes an operating permit program for major sources. The purpose of Title V is to ensure that all "applicable requirements" for compliance with the CAA are collected in one place.
 - b. Title V requires that each permit issued under this program include enforceable emission limitations and such other conditions as are necessary to assure compliance with "applicable requirements" of the CAA, including the requirements of the applicable SIP.
 - c. Under Title V, any owner or operator of a source subject to the Title V program is required to submit a timely and complete permit application that contains information sufficient to determine the applicability of any CAA requirements,

certifies compliance with all applicable requirements, and contains a compliance plan for all applicable requirements for which the source is not in compliance.

- d. Under Title V, any applicant who fails to submit any relevant fact or who has submitted incorrect information in a permit application is required to promptly submit such supplementary facts or corrected information upon becoming aware of such failure or incorrect submittal.
- e. Title V program requirements are codified at Section 503 of the CAA, 42 U.S.C. § 7661b with implementing regulations at 40 C.F.R. Part 70.

Explanation of Violations

- 1. BP Whiting has the potential to emit several regulated NSR pollutants in excess of 100 tons per year, making it a major stationary source.
- 2. Beginning in early 2005, BP Whiting performed a turnaround (TAR) at its fluidized catalytic cracking unit designated as FCU 500, as well as other projects at associated units.
- 3. Certain projects performed at the refinery, including but not limited to projects related to the 2005 TAR, allowed BP to commence construction of its Canadian crude expansion project. These projects constitute a major modification to an air pollution source without an appropriate permit.
- 4. The commencement of construction of this major modification allows BP to, among other things, process feed derived from Canadian crude in a manner that could increase emissions of NO_x, SO₂, CO, PM, and PM₁₀ by significant amounts at the units specified in Appendix A.
- 5. BP Whiting failed to obtain any permits, conduct any modeling, install BACT, or undergo any other sort of pre-construction review for this modification.
- 6. BP Whiting failed to obtain a construction permit for this modification, in violation of Indiana SIP Rule 326 IAC 2-1-03(a).
- 7. BP Whiting is located in Lake County, Indiana. In February 2005, Lake County, Indiana was listed as attainment or unclassifiable for CO, PM, PM₁₀, and NO₂ and as non-attainment for SO₂ and ozone.
- 8. Because a NO_x waiver did not apply to the ozone standard for which Lake County was in non-attainment, and NO_x is a pre-cursor for ozone, the non-attainment provisions of the Indiana SIP apply to major modifications with significant NO_x emission increases.

9. Because NO_x also contributes to ambient levels of NO₂ and Lake County, Indiana is in attainment for NO₂, the PSD provisions of the Indiana SIP also apply to major modifications with significant NO_x emissions increases.
10. With regard to CO, PM, PM₁₀, and NO_x, BP Whiting's failure to obtain a permit for this major modification meeting the PSD requirements in Indiana SIP Rule 326 IAC 2-2 is a violation of Indiana SIP Rule 326 IAC 2-1-03(c).
11. BP Whiting's failure to apply BACT on the units specified in Appendix A to control emissions of CO, PM, PM₁₀, and NO_x is a continuing violation of Indiana SIP Rule 326 IAC 2-2-3(2).
12. BP Whiting's failure to demonstrate that allowable emission increases from this major modification will not cause or contribute to air pollution in violation of any ambient air quality standard or applicable maximum allowable increase over the baseline concentration in any area is a violation of Indiana SIP Rule 326 IAC 2-2-5.
13. With regard to SO₂ and NO_x, BP Whiting's failure to obtain a permit for this major modification meeting the nonattainment NSR requirements in Indiana SIP Rule 326 IAC 2-3 is a violation of Indiana SIP Rule 326 IAC 2-1-03(d).
14. BP Whiting's failure to apply controls achieving LAER on the units specified in Appendix A for emissions of SO₂ and NO_x is a continuing violation of Indiana SIP Rule 326 IAC 2-3-3(a) (2).
15. BP Whiting's failure to offset emissions resulting from this major modification by reducing actual emissions of SO₂ and NO_x from an existing source or combination of existing sources is a violation of Indiana SIP Rule 326 IAC 2-3-3(a) (5).

Title V

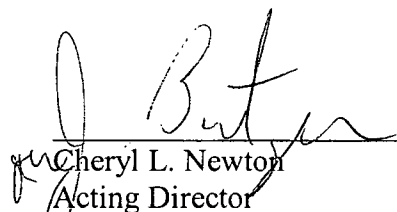
16. BP Whiting is continuously violating Title V permitting requirements in Section 503 of the CAA and 40 C.F.R. Part 70, because it has yet to submit a complete application for a Title V operating permit for the Facility that identifies all applicable requirements, that accurately certifies compliance with such requirements, and that contains a compliance plan for all applicable requirements for which it is not in compliance.

Environmental Impact of Violations

1. Excess emissions of NO_x increase ground level concentrations of ozone and nitrogen dioxide, both of which can cause respiratory inflammation, increased difficulty breathing, and lung damage. NO_x emissions also contribute to acid rain, global warming, the formation of fine particles in the atmosphere, water quality deterioration, and visibility impairment.

2. Excess emissions of SO₂ increase the amount of acid rain and public exposure to unhealthy levels of SO₂. SO₂ reacts with other chemicals in the air to form tiny sulfate particles. Long term exposure to high levels of SO₂ gas and particles can cause respiratory illness, aggravate existing heart disease, and lead to premature death.
3. Excess emissions of CO increase public exposure to CO, which can enter the bloodstream reducing oxygen delivery and can aggravate cardiovascular disease.
4. Excess emissions of PM and PM₁₀ increase public exposure to unhealthy fine particulate matter. Fine particulate matter contributes to respiratory problems, lung damage, and premature deaths.

October 1, 2008
Date


Cheryl L. Newton
Acting Director
Air and Radiation Division

Appendix A

Facility	Emissions Units/Description of Changes
No.11 pipestill	Installation of Ultra-low-NO _x burners on H-200
New Coker	New Coker, new heaters H-201, H-202, H-203, and VRU 400
No. 12 pipe still	New heaters H-101A, H-101B, H-102
Sulfur Recovery Unit	New COT1 and COT2 tail gas units, tanks SH-1 and SH-2; new trains D and E, and sulfur pits D and E
Isomerization Unit	Modified heater ISOM H-1
Blending Oil Unit	Modified heater F-401
Fluidized Catalytic Cracking Unit (FCU) 500	2005 Turnaround
FCU 600	Modified unit
Marine dock facility	Installation of Vapor Recovery/Control Unit on gasoline loading
Hydrocarbon Flares	New flares South, GOHT
Distillate Hydrotreating Unit	New heater B-601A
New Gas Oil Hydrotreater	New heaters F-901A and F-901B
New Hydrogen Unit	New heaters HU-1 and HU-2, HU flare and HU Cooling Tower
Cooling Towers	New cooling towers 7 and 8
Boilers	New boilers 1 and 2
Miscellaneous	Any other emission units physically changed that emit CO, PM ₁₀ , PM, NO _x , and SO ₂

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent an Amendment to the Notice of Violation and Finding of Violation, No. EPA-5-08-IN-01, by Certified Mail, Return Receipt Requested, to:

Daniel Sajkowski, Business Unit Leader
BP Products North America, Inc.
2815 Indianapolis Boulevard
Whiting, Indiana 46394

I also certify that I sent copies of the Amendment to the Notice of Violation and Finding of Violation by first class mail to:

Craig Henry, Chief
Office of Enforcement Air Section
Indiana Department of Environmental Management
100 North Senate Avenue, Room 1001
Indianapolis, Indiana 46206-6015

and to:

William L. Patberg
Shumaker, Loop & Kendrick, LLP
1000 Jackson Street
Toledo, Ohio 43604-5573

on the 2nd day of October, 2008.



Betty Williams, Secretary
AECAS, (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: 7001 03200006 0186 1603